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BARNES & THORNBURG LLP
P.O. BOX 2786
CHICAGO, IL 60690-2786

| EXAMINER | |
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| NGO, NGUYEN HOANG | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| **Office Action Summary** | **Application No.** 09/975,841 | **Applicant(s)** SMITH ET AL. | |
|---|---|---|---|
| | **Examiner** Nguyen Ngo | **Art Unit** 2616 | |

***-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *16 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. This communication is in response to the amendment of 5/16/2007. Accordingly, Claims 1-36 are currently pending in the application.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

    1. Determining the scope and contents of the prior art.
    2. Ascertaining the differences between the prior art and the claims at issue.
    3. Resolving the level of ordinary skill in the pertinent art.
    4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6, 8, 11, 12, 16-20, 22, 23, 24-28, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan (US 69345301) in view of Bisson et al. (US 6965619), hereinafter referred to as Jordan and Bisson.

**Regarding claim 1**, Jordan discloses a method for converting bursty, packetized data traffic from a wide bandwidth network to a constant, average rate traffic on a payload network having a narrower bandwidth (a method of mapping a packet orientated client signal to a synchronous network payload, abstract). Jordan further discloses;

receiving conventional data packet from a Gigabit Ethernet network (receiving said client signal (Ethernet), 104 of figure 1 and col4 lines 34-36).

removing the idle bytes to reduce a transmitted bit stream, framing the packets, and providing the framed data packets to a payload network (processing said client signal (Ethernet) to a form suitable for mapping to said payload (framing), col4 lines 39-46) and gives the example of transmitting on a conventional standard bandwidth SONET payload network with no loss of data content (wherein said step of processing reduces the bandwidth of the client signal while maintaining the integrity of a payload of the client signal, col4 lines 35-39).

Jordan however fails to specifically disclose preserving a buffer-to-buffer flow control mechanism of the client signal. Jordan however discloses preventing buffer overflows (col7 lines 48). Bisson further discloses flow control involving buffers that perform rate adaptation and absorbs burst of data from the client and further discloses the regulation of flow of data across the network by monitoring the status of the buffers at each end of the link (buffer to buffer flow control, col5 lines 53-65). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of flow control of buffers as disclosed by Bisson into the method

for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan in order to prevent any buffer overflow and loss of data.

**Regarding claim 2, 3 and 4**, the combination of Jordan and Bisson, more specifically Jordan discloses that a data content of the 1 Gb Ethernet stream is typically less than about 600 MB, and the remainder being idle bytes and further discloses removal of the idle bytes from the 1 Gb Ethernet stream permits the Ethernet valid payload to fit the OC12 bandwidth without any loss of data content (the bandwidth is reduced by removing redundant information, idles, or primitive sequence from said client signal, col4 lines 55-61). It is further noted that applicant states that any client signal suitably formatted for transportation over a synchronous communications network typically includes redundant signaling code (redundant information), for example, idles on page 6 of the specification and further discloses that a primitive signals may be idles on page 17 of the specification.

**Regarding claim 5 and 6**, the combination of Jordan and Bisson, more specifically Jordan, discloses that the data packet is formatted in accordance with a protocol of the broadband network, and that Ethernet is basically a broadcast protocol. That it includes but is not limited to 1Mb Ethernet, 10-Mb Ethernet, Fast Ethernet, and 1-Gb Ethernet (buffer-to-buffer flow control mechanism is provided according to a Fibre Channel protocol or a ESCON protocol class of service, col1 lines 35-46). It is noted that that applicant states any appropriate client signal protocols for transmission in a

synchronous digital environment, which incorporate some redundancy, for example, 10B encoded signals such as Fibre Channel, ESCON, or Gigabit Ethernet (as disclosed by Jordan), may be optimized for bandwidth allocation by removal of redundant signals on page 6 of the specification.

**Regarding claim 8**, the combination of Jordan and Bisson, more specifically Jordan, discloses that the SONET network is selected from a group consisting of OC1, OC3, and OC12 (synchronous payload is taken from the group consisting of SONET virtual container payloads, SDH virtual container payloads, virtually concatenated SONET virtual container payloads, virtually concatenated SDH container payloads, contiguously concatenated SONET virtual container payloads, and contiguously concatenated SDH virtual container payloads, col11 lines 12-16).

**Regarding claim 11**, the combination of Jordan and Bisson, more specifically Jordan, discloses a control logic block and a GbE controller (figure 1 and 2), which controls the payload allocation (the bandwidth of the synchronous payload is allocated by a network management system).

**Regarding claim 12**, the combination of Jordan and Bisson, more specifically Jordan, discloses of a framer that is connected to the payload network (the bandwidth of the synchronous payload is allocated by an apparatus (framer) implementing the method of mapping, col6 lines 5-7).

**Regarding claim 16**, Jordan discloses a method for converting bursty, packetized data traffic from a wide bandwidth network to a constant, average rate traffic on a payload network having a narrower bandwidth (a method of mapping a packet oriented client signal (Ethernet) that uses a buffer-to-buffer flow control mechanism to a synchronous transmission network (SONET), abstract). Jordan further discloses;

receiving conventional data packet from a Gigabit Ethernet network (104 of figure 1 and col4 lines 34-36) and determines if the "current" byte is a non-idle byte (col6 lines 45-49) and inputting the non-idle byte into an input buffer. Jordan further discloses that when the idle state signal indicates that the "current" byte is idle, the "current" byte will not be written into the buffer (processing said client signal to remove at least one order set (idle) provided according to a protocol of said client signal to form a second signal (serial data stream with no idle bytes) and storing the second signal in an ingress buffer, col7 lines 24-28).

framing the packets, and providing the framed data packets to a payload network (mapping the second signal to said synchronous payload, col4 lines 39-46) and gives the example of transmitting on a conventional standard bandwidth SONET payload network with no loss of data content (wherein said step of processing reduces the bandwidth of the client signal while maintaining the integrity of a payload of the client signal, col4 lines 35-39).

Jordan however fails to specifically disclose preserving a buffer-to-buffer flow control mechanism of the client signal. Jordan however discloses preventing buffer overflows (col7 lines 48). Bisson further discloses flow control involving buffers that perform rate adaptation and absorbs burst of data from the client and further discloses the regulation of flow of data across the network by monitoring the status of the buffers at each end of the link (buffer to buffer flow control, col5 lines 53-65). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of flow control of buffers as disclosed by Bisson into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan in order to prevent any buffer overflow and loss of data.

**Regarding claim 17, 18, and 19**, the combination of Jordan and Bisson, more specifically Jordan discloses that a data content of the 1 Gb Ethernet stream is typically less than about 600 MB, and the remainder being idle bytes and further discloses removal of the idle bytes from the 1 Gb Ethernet stream permits the Ethernet valid payload to fit the OC12 bandwidth without any loss of data content (the bandwidth is reduced by removing redundant information, idles, or primitive sequence from said client signal, col4 lines 55-61). It is further noted that applicant states that any client signal suitably formatted for transportation over a synchronous communications network typically includes redundant signaling code (redundant information), for example, idles on page 6 of the specification and further discloses that a primitive signals may be idles on page 17 of the specification.

**Regarding claim 20**, Jordan discloses from figure 2, of a method for converting the data packet of the OCnc payload network back to the format of the data packet for the 1Gb Ethernet network (a method of restoring a packet oriented client signal from at least one synchronous network payload, col8 lines 13-19). Jordan further discloses;

of receiving an OCnc data packet from the payload network (receiving said synchronous payload, col8 lines 40).

of a deframer that removes any header and routing information which has been added by the framer and a serializer-deserializer which converts the parallel data in the OCnc packet to a corresponding serial data stream (de-mapping said signal from synchronous payload, col8 lines 39-54).

of storing the serial data stream in a buffer (storing said signal in an egress buffer, buffer 218 of figure 2).

and of the serializer-deserializer that receives the serial data stream from buffer 218, converts the outputted serial data stream to a parallel data packet formatted for 1 Gb Ethernet network (processing said signal to add at least one ordered set (idle) provided according to a protocol of said packet orientated client signal, figure 2 and col9 lines 19-24) and gives the example of transmitting on a conventional standard bandwidth SONET payload network with no loss of data content (maintains the integrity of a payload of the client signal, col4 lines 35-39).

Jordan however fails to specifically disclose preserving a buffer-to-buffer flow control mechanism of the client signal. Jordan however discloses preventing buffer overflows (col7 lines 48). Bisson further discloses flow control involving buffers that perform rate adaptation and absorbs burst of data from the client and further discloses the regulation of flow of data across the network by monitoring the status of the buffers at each end of the link (buffer to buffer flow control, col5 lines 53-65). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of flow control of buffers as disclosed by Bisson into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan in order to prevent any buffer overflow and loss of data.

**Regarding claim 22 and 23**, the combination of Jordan and Bisson, more specifically Jordan discloses of adding idle frames back into the data stream as seen in figure 2 (one ordered set is a client signal idle inserted between client signal packets in said signal according to the client signal protocol). It is further noted that applicant states that any client signal suitably formatted for transportation over a synchronous communications network typically includes redundant signaling code (redundant information), for example, idles on page 6 of the specification and further discloses that a primitive signals may be idles on page 17 of the specification (ordered set is a primitive sequence inserted).

**Regarding claims 24-28**, the combination of Jordan and Bisson, more specifically Jordan discloses the apparatus, which performs all the steps of the method as discussed in claim 16. The Apparatus disclosed by Jordan clearly anticipates claims 24-28 as discussed with claim 16 and figure 1.

**Regarding claim 36**, Jordan discloses a method for converting bursty, packetized data traffic from a wide bandwidth network to a constant, average rate traffic on a payload network having a narrower bandwidth (a method of allocating bandwidth in a synchronous digital network for a packet oriented signal (Ethernet) having buffer-to-buffer flow control, abstract). Jordan further discloses;

receiving conventional data packet from a Gigabit Ethernet network (receiving packet oriented signal (Ethernet), 104 of figure 1 and col4 lines 34-36).

removing the idle bytes to reduce a transmitted bit stream, framing the packets, and providing the framed data packets to a payload network (processing said packet oriented signal to a processed signal having a form suitable for mapping to a synchronous payload, step of processing removes redundant (idle) information from the packet oriented signal, col4 lines 39-46) and gives the example of transmitting on a conventional standard bandwidth SONET payload network with no loss of data content (while maintaining the integrity of a payload of the packet oriented signal, col4 lines 35-39).

providing a reduced data stream, by removal of idle bytes and providing the reduced data stream to the payload network (mapping said processed signal (reduced

data stream) to a said synchronous network payload having bandwidth determined according to the bandwidth of said processed signal (reduce data stream), col10 lines 25-32).

Jordan however fails to specifically disclose preserving a buffer-to-buffer flow control mechanism of the client signal. Jordan however discloses preventing buffer overflows (col7 lines 48). Bisson further discloses flow control involving buffers that perform rate adaptation and absorbs burst of data from the client and further discloses the regulation of flow of data across the network by monitoring the status of the buffers at each end of the link (buffer to buffer flow control, col5 lines 53-65). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of flow control of buffers as disclosed by Bisson into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan in order to prevent any buffer overflow and loss of data.

**Regarding claim 10**, Jordan and Bisson fails to specifically disclose the step of padding said processed client signal so that said processed client signal is appropriately padded to fill a predetermined synchronous payload bandwidth. This is however a well-known technique in the art and thus should be obvious that a padding technique be used in order to complete the bytes of a payload for transmission.

**Regarding claim 21**, Jordan and Bisson fails to disclose the specific limitation of removing one padding character added to said signal prior to being mapped to said synchronous payload. This is however a well-known technique in the art and thus should be obvious as mentioned in claim 10.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan (US 6934301) in view of Bisson et al. (US 6965619) in further view of Rauch (US 6243510), hereinafter referred to as Jordan, Bisson and Rauch.

**Regarding claim 7**, the combination of Jordan and Bisson fails to disclose the specific limitation of having the packet orientated client signal be provided according to a higher level protocol supported by said Fibre Channel protocol. Jordan however discloses that the data packet is formatted in accordance with a protocol of the broadband network (Ethernet) and provides the motivation to have the data packet according to a higher level protocol to efficiently transmit the data packet.

Rauch further discloses that IEEE 802.3x standards (Gigabit Ethernet) define a 1.25 Gbps fiber optics communications protocol, which is based on the Fibre Channel protocol (higher level protocol supported by said Fibre Channel protocol and which has a buffer-to-buffer flow control mechanism, col1 lines 35-37). It would thus be obvious to incorporate the Fibre Channel protocol as disclosed by Rauch into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan to efficiently and correctly transfer data packets.

7. Claims 9 and 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan (US 6934301) in view of Bisson et al. (US 6965619) in further view of Azizoglu et al. (US 6430201), hereinafter referred to as Jordan, Bisson, and Azizoglu.

**Regarding claim 9 and 15**, the combination of Jordan and Bisson fails to disclose the specific limitation of a step of removing line encoding and multiplexing client signals together to share said synchronous payload.

Azizoglu however discloses that there is a need for an optical network interface that can accept and multiplex GbE/FC (Fiber Channel) signals into a synchronous format signal such as a SONET signal and thus provides the motivation to efficiently use resource of a SONET network. Azizoglu further discloses that 10-bit parallel streams are decoded by 8/10b codecs (22-1 and 22-2 of figure 3), which remove the run-length code overhead of each stream (processing the client signal further includes a step of removing line encoding, col4 lines 40-45) and further discloses a multiplexing method of combining two GbE signals into an OC-48 wavelength as shown in figure 2 (plurality of clients signals are multiplexed together to share said synchronous payload, col4 lines 39-43). It should thus be obvious to a person skilled in the art to incorporate the method of multiplexing to GbE signals into a SONET signal as described by Azizoglu into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan to efficiently use the resources and bandwidth of the SONET network.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan (US 6934301) in view of Bisson et al. (US 6965619) in further view of Gerszberg et al. (US 6452923), hereinafter referred to as Jordan, Bisson and Gerszberg.

**Regarding claim 13**, the combination of Jordan and Bisson fails to disclose the specific limitation of having the synchronous payload bandwidth modified in response to customer bandwidth demands increasing or decreasing. Gerszberg however discloses a customer may have a lower priority bandwidth usage. Thus when traffic begins to increase (demands increasing/decreasing), the customers bandwidth usage may be modified (bandwidth is modified in response to customer bandwidth demands increasing/decreasing, col39 lines 10-17). It should thus be obvious to a person skilled in the art to incorporate the method of modifying the usage of bandwidth in accordance to a customer priority as disclosed by Gerszberg into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan to efficiently use the resources and bandwidth of the SONET network for a particular customer.

10. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan (US 6934301) in view of Bisson et al. (US 6965619) in further view of Goodman et al. (US 6636529), hereinafter referred to as Jordan, Bisson, and Goodman.

**Regarding claim 14**, the combination of Jordan and Bisson fails to disclose the specific limitation of having the bandwidth modified in response to changed in data throughput as distance between the end data packet nodes changes. Jordan however discloses that there are significant limitations on the physical distance that a network can cover (col2 lines 19-23), thus providing the motivation to efficiently use the bandwidth of a SONET network which is dependent on distance between nodes.

Goodman further discloses that the synchronous payload bandwidth (data rate) is modified (significantly reduced) in response to changes in data throughput (delays caused by handshaking) as distance between the end data packet nodes changes (reduced for communications greater than 10m, col8 lines 26-32). It would thus be obvious to incorporate the method of modifying the payload bandwidth as distance between end nodes changes as disclosed by Goodman into the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan to efficiently use the resources and bandwidth of the SONET network and to prevent data loss.

11. Claim 30-35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan (US 6934301) in view of Bisson et al. (US 6965619) in further view of Heuer (US 6842455), hereinafter referred to as Jordan, Bison, and Heuer.

**Regarding claim 30**, Jordan discloses a method for converting bursty, packetized data traffic from a wide bandwidth network to a constant, average rate traffic on a payload

network having a narrower bandwidth (packet orientated client signal across a synchronous network, abstract). Jordan further discloses receiving conventional data packet from a Gigabit Ethernet network (receiving packet oriented signal (Ethernet), 104 of figure 1 and col4 lines 34-36) and removing the idle bytes to reduce a transmitted bit stream, framing the packets, and providing the framed data packets to a payload network (processing said client signal to a processed signal having a form suitable for mapping to a synchronous payload, step of processing removes redundant (idle) information from the packet oriented signal, col4 lines 39-46) and further discloses of preventing buffer overflows (preserves a buffer-to-buffer flow control mechanism of the client signal, col7 lines 48) and gives the example of transmitting on a conventional standard bandwidth SONET payload network with no loss of data content (while maintaining the integrity of a payload of the packet oriented signal and mapping said processed signal to said synchronous network payload, col4 lines 35-39). The combination of Jordan and Bisson however fails to disclose the specific limitations of load balancing.

Heuer however discloses a method of load balancing that comprises the steps of pre-allocating an initial bandwidth of said synchronous network payload (use of VC-4-4v in fig 1, in a virtual concatenation as disclosed in column 3 lines 15-17) according to a predetermined condition (periods of high traffic, col 3 lines 38-42), wherein said payload comprises a plurality of virtually concatenated virtual containers (fig 1 items 13a-13d), diversely routing said synchronous network payload over said synchronous network

(col3 lines 20-24), and in the event of a change in a condition of the network (periods where number of IP packets does not suffice... col3 lines 43-58), modifying the allocated bandwidth (fig 2 uses only 3 virtual containers 13a-13c). It would have been obvious to one ordinarily skilled in the art at the time of the invention to incorporate the method of load balancing disclosed by Heuer with the method for converting data packets between a higher bandwidth network and a lower bandwidth network as disclosed by Jordan to efficiently use the resources of the SONET network, more specifically to adapt the number of concatenated multiplex units to the bandwidth actually required.

**Regarding claim 31-32 and 34**, the combination of Jordan, Bisson, and Heuer discloses all the limitations of claims 31-32 and 34, more specifically, Heuer discloses that the bandwidth is automatically modified by the apparatus performing the mapping, as disclosed in col4 lines 34-45, wherein at the time thresholds the bandwidth is changed automatically to a pre-allocated value.

**Regarding claim 33**, the combination of Jordan Bisson, and Heuer discloses all the limitations of claims 33, more specifically, Heuer discloses that the pre-allocation bandwidth is determined by requirements requested by a user of the network, as high traffic loads as discussed in claim 30, represent a user or users requiring bandwidth for a greater amount of traffic.

**Regarding claim 35**, the combination of Jordan Bisson, and Heuer discloses all the limitations of claims 35, more specifically, Heuer discloses that the pre-allocation is determined by the condition of the synchronous network, as all 4 virtual containers of figure 1 are used due to the high traffic period condition of the data network as discussed in claim 30.

***Response to Arguments***

3. Applicant's arguments filed 5/16/2007 have been fully considered but they are not persuasive.

4. Applicant submits that Bison does not show interfacing a client signal to a synchronous network including mapping as claimed. Examiner however uses the teaching of Bison to simply show the well-known concept of buffer-to-buffer flow control. Examiner has corrected the citation error of page 4 cols 53-65 to the corrected citation of col5 lines 53-65 as further mentioned in the remarks, page 9 and page 10. Examiner is not concern with the full details of Bison, but the simple teachings of a buffer to buffer flow control of a signal as stated in col5 lines 53-65. Buffer-to buffer flow control is a well-known concept and Examiner thus uses Bison to illustrate this concept. It should further be noted that Jordan discloses of buffer overflows (col7 line 48) and thus it would have been obvious to a person skilled in the art to incorporate the buffer-to-buffer flow control concept of Bison into the method of converting data packets between networks

as disclosed by Jordan to ensure that buffers do not overflow and that there is no loss of data in order to ensure Quality of Service.

## *Conclusion*

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*** N.N.

**Nguyen Ngo**
United States Patent & Trademark Office
Patent Examiner AU 2663
(571) 272-8398

6/22/07

WING CHAN
SUPERVISORY PATENT EXAMINER